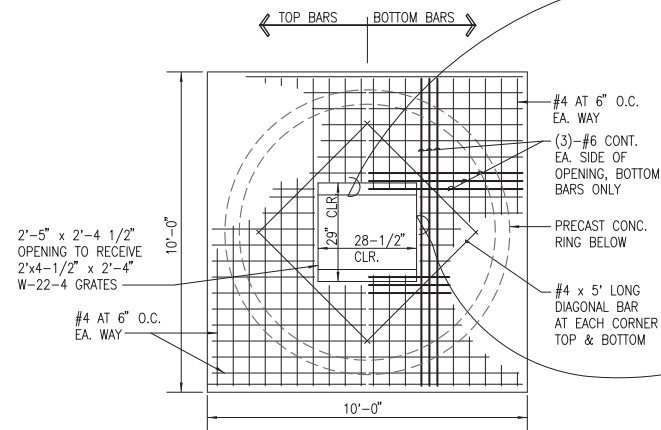
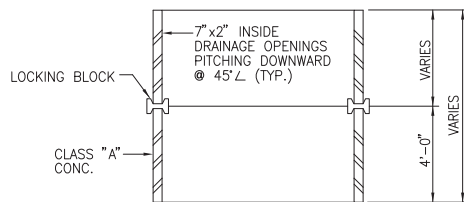


DRYWELL (BEARING CURB SECTION)
NOT TO SCALE



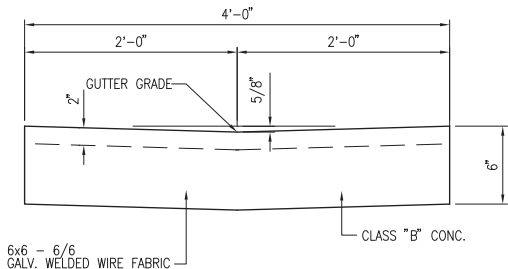
DRYWELL COVER
NOT TO SCALE



SECTION A-A
NOT TO SCALE

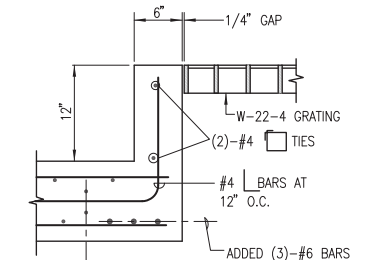
- NOTES:
1. MINIMUM CONCRETE COMPRESSIVE STRENGTH, f_c , SHALL BE 3000 PSI
 2. MINIMUM REINFORCING STEEL YIELD STRENGTH, F_y , SHALL BE 60 KSI
 3. FLAT BARS, RODS, AND ANGLE STEEL FOR GRATING AND SEAT SHALL BE ASTM A36, GRADE 36.
 4. GRATING SHALL BE WELDED AND HOT DIP GALVANIZED AFTER FABRICATION.
 5. SEAT ANGLE SHALL BE WELDED AND HOT DIP GALVANIZED AFTER FABRICATION.
 6. ALL EXPOSED CONCRETE EDGES SHALL RECEIVE 3/4" RADIUS ROUND.

MODIFIED DRYWELL W/CURBING AND W-22-4 GRATING
NOT TO SCALE



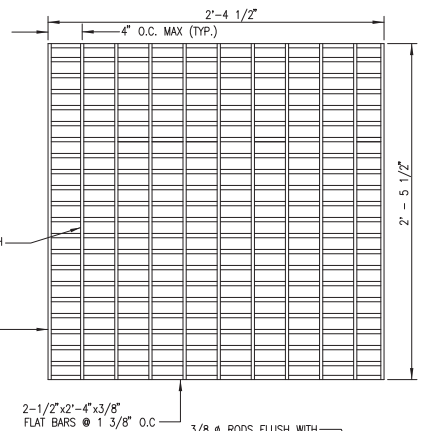
- NOTES:
1. CONSTRUCTION JOINTS SHALL BE KEYED CONSTRUCTION JOINTS WITH TIE BARS

THRU GUTTER DETAIL
NOT TO SCALE

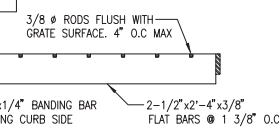


SECTION AT BEARING CURB

SECTION AT NON-BEARING CURB

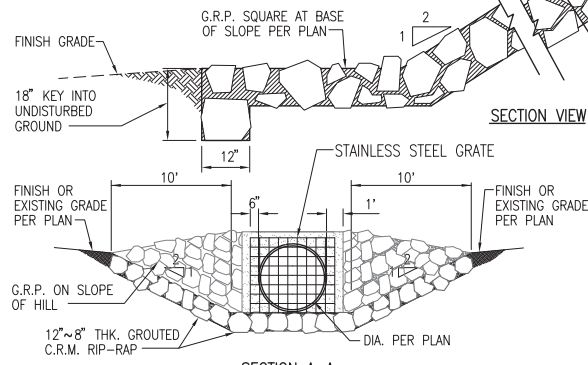


W-22-4 GRATE

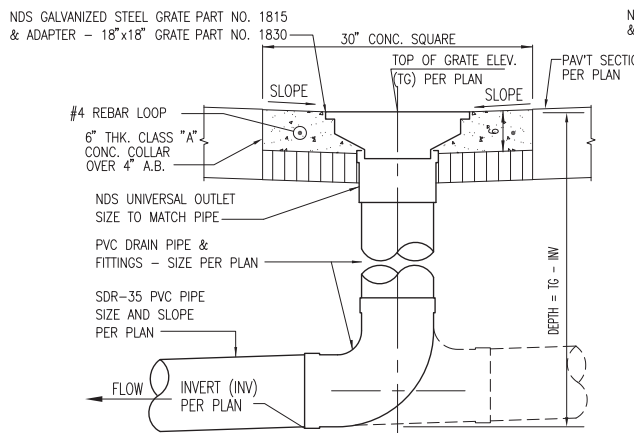


- NOTES:
1. RIP-RAP MATERIAL MAY BE OMITTED WHERE SOLID BEDROCK IS ENCOUNTERED

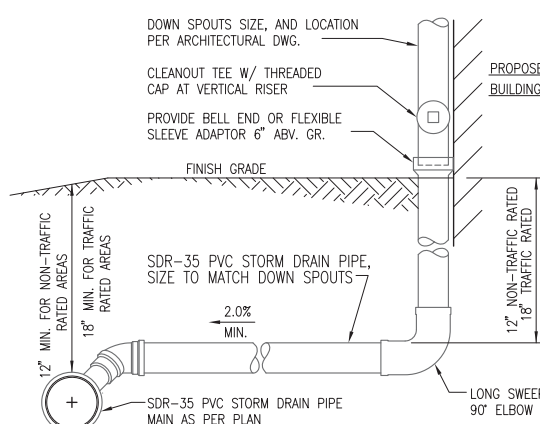
DOWN DRAIN RIPRAP DETAIL
NOT TO SCALE



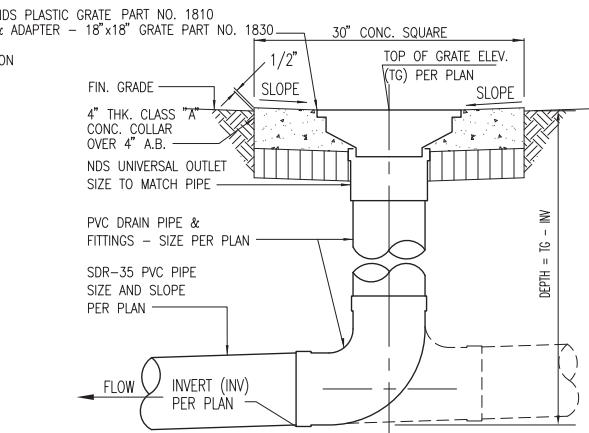
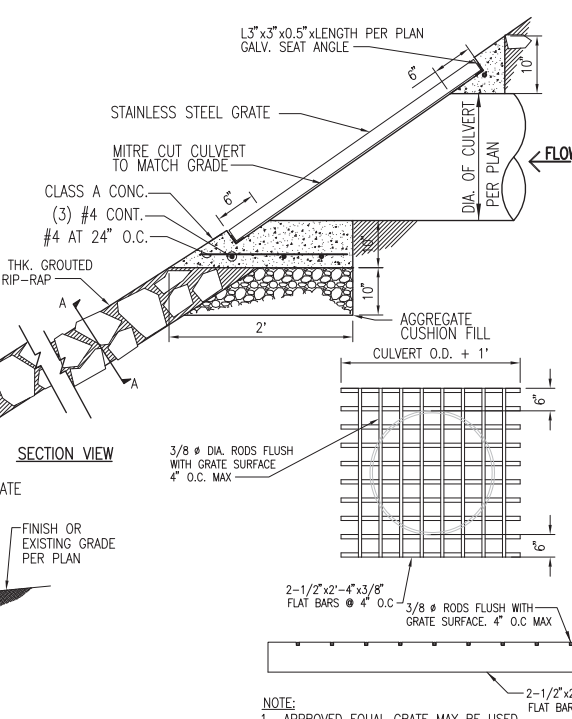
SECTION A-A



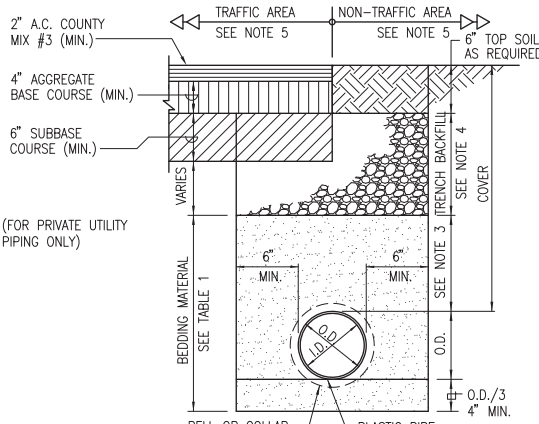
TRAFFIC RATED YARD DRAIN w/GRATE DETAIL
NOT TO SCALE



DOWNSPOUT DETAIL
NOT TO SCALE



GRATED YARD DRAIN DETAIL
NOT TO SCALE



- NOTES:
1. THIS TRENCH SECTION APPLIES TO FLEXIBLE PIPES INCLUDING SEWER, STORM DRAIN, FLEXIBLE PIPE MATERIAL INCLUDES CMP, PVC, ABS, AND HDPE.
 2. THIS TRENCH SECTION APPLIES TO PIPING WITHIN PRIVATE PROPERTIES ONLY.
 3. BEDDING MATERIAL ABOVE PIPE SHALL BE 12" HIGH FOR GRANULAR MATERIAL AND 6" HIGH FOR CONCRETE. GRANULAR BEDDING MATERIAL SHALL BE COMPACTED TO 95% COMPACTION.
 4. TRENCH BACKFILL SHALL BE 3" MINUS GRANULAR BACKFILL OR SUITABLE NATIVE MATERIAL NO LARGER THAN 6". TRENCH BACKFILL SHALL BE COMPACTED TO 95% COMPACTION.
 5. TRAFFIC AREA SHALL INCLUDE BUT NOT LIMITED TO PAVED OR UNPAVED ROADWAY, SHOULDER, DRIVEWAY, CART PATH, PARKING, LOADING ZONE, STORAGE AREA AND AREAS NOT PROTECTED FROM TRAFFIC LOAD. NON-TRAFFIC AREA SHALL BE PROTECTED FROM TRAFFIC LOAD BY MEANS OF CONCRETE CURBS, GUARDRAILS, BARRICADE, AND AREAS INACCESSIBLE BY VEHICLES.

DEPTH OF COVER IN FT.	TRAFFIC AREA	NON-TRAFFIC AREA
6" < COVER < 12"	NOT ALLOWED	ALLOWED FOR 6" PIPE OR SMALLER ONLY WITH NO. 10 CRUSHED ROCK
12" < COVER < 18"	ALLOWED FOR 6" PIPE OR SMALLER ONLY WITH CLASS "C" CONCRETE	NO. 10 CRUSHED ROCK (#4 SAND)
18" < COVER < 24"	CLASS "C" CONCRETE	NO. 10 OR NO. 67 CRUSHED ROCK
COVER > 24"	NO. 10 OR NO. 67 CRUSHED ROCK	NO. 10 OR NO. 67 CRUSHED ROCK

FLEXIBLE PIPE TRENCH SECTION
NOT TO SCALE

Engineering Partners, Inc.

Progressive Solutions
455 ELANIKA STREET
HILO, HAWAII 96720
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DATE: 2014-02-10

SHEET NO. C-003

OF 1

DESIGNED BY: OH

DRAWN BY: OH

CHECKED BY: YMF

MARK: 1

DATE: 4/10/14

DESCRIPTION: SIDEWALK CURB EDITED, SWALE REMOVED & THRU GUTTER ADDED

MARK: 2

DATE: 5/07/14

DESCRIPTION: ADDENDUM #6

REVIEWED: _____

DATE: _____

DEPARTMENT OF PARKS AND RECREATION

COUNTY OF HAWAII

DEPARTMENT OF PARKS & RECREATION

101 PALAHU STREET SUITE 67 HILO, HAWAII 96720 / PHONE: 808.961.8311 / FAX: 808.961.8411

PAHOA PARK MASTER PLAN

PHASE I - BID SUBMITTAL 2014-02-10

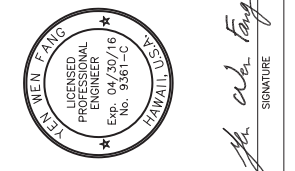
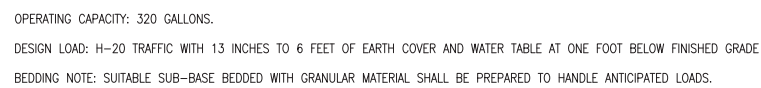
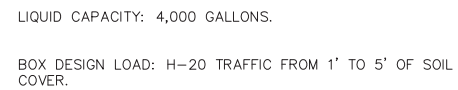
PAHOA, PUNA, HAWAII


JOB NO.: PR-4234

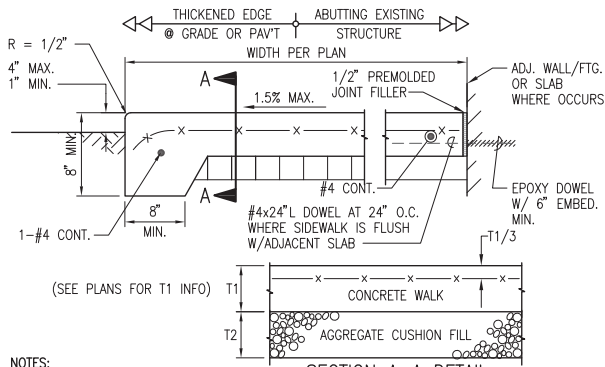
PLAN SHEET DESCRIPTION: CIVIL DETAILS

TMK: (3) 1-5-002:020

PAHOA PARK MASTER PLAN

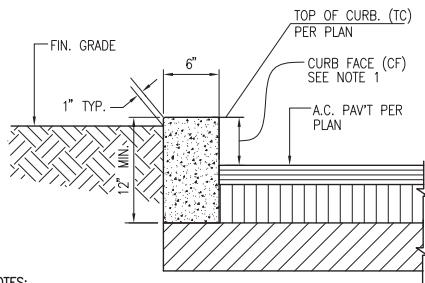
[illegible]

DESIGNED BY:	OH		<p>COUNTY OF HAWAII DEPARTMENT OF PARKS & RECREATION 101 PALAHU STREET, SUITE 6 / HILO, HAWAII 96720 / PHONE: 808.961.8311 / FAX: 808.961.8411</p>
DRAWN BY:	OH		
CHECKED BY:	YMF		
<p>SHEET NO. C-006</p>		<p>PAHOA PARK MASTER PLAN PHASE I - BID SUBMITTAL 2014-02-10</p>	
<p>DATE: 2014-02-10</p>		<p>JOB NO.: PR-4234 PAHOA, PUNA, HAWAII TMK: (3) 1-5-002:020</p>	
<p>PLAN SHEET DESCRIPTION: CIVIL DETAILS</p>		<p>△ OF SHEETS</p>	



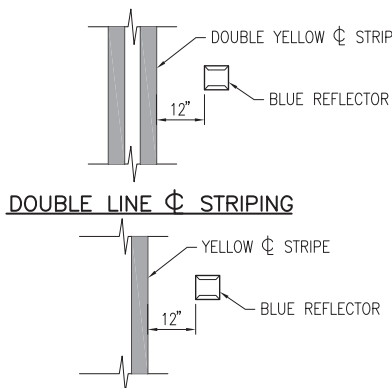
- NOTES:
- U.O.N. MINIMUM REQUIREMENTS SHALL BE:
1. CONCRETE SHALL BE CLASS 18". T1=> 4".
2. AGGREGATE CUSHION FILL SHALL BE ASTM C33 NO. 67. T2=> 4".
3. REINFORCING SHALL BE GALVANIZED 6"x6" 10/10 (6"x6" W1.4xW1.4) WWM.

3 TYP. CONC. WALK DETAIL NOT TO SCALE



- NOTES:
- U.O.N. CURB FACE SHALL BE 6" HIGH.
 - SAWCUT EXPANSION JOINT IN CURB AT 10' O.C. AND AT B.C.R., E.C.R AND M.O.C.
 - WHEN CURB FACE IS HIGHER THAN 6", TOTAL HEIGHT SHALL BE CF x 2.
 - SEE A.C. PAV'T AND CONC. WALK DETAILS FOR BALANCE OF INFO.

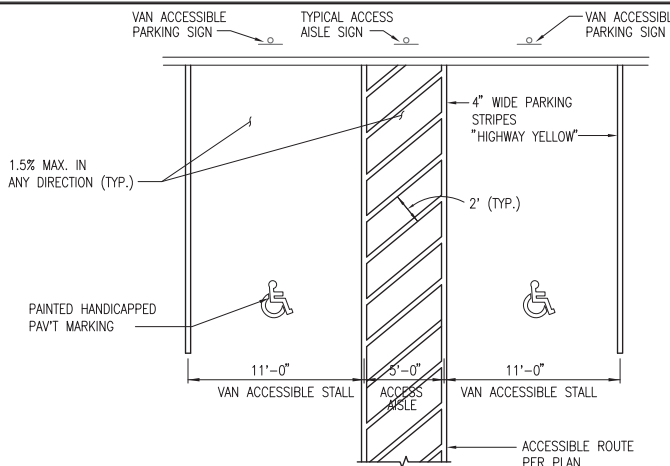
4 PLANTER CURB DETAIL NOT TO SCALE



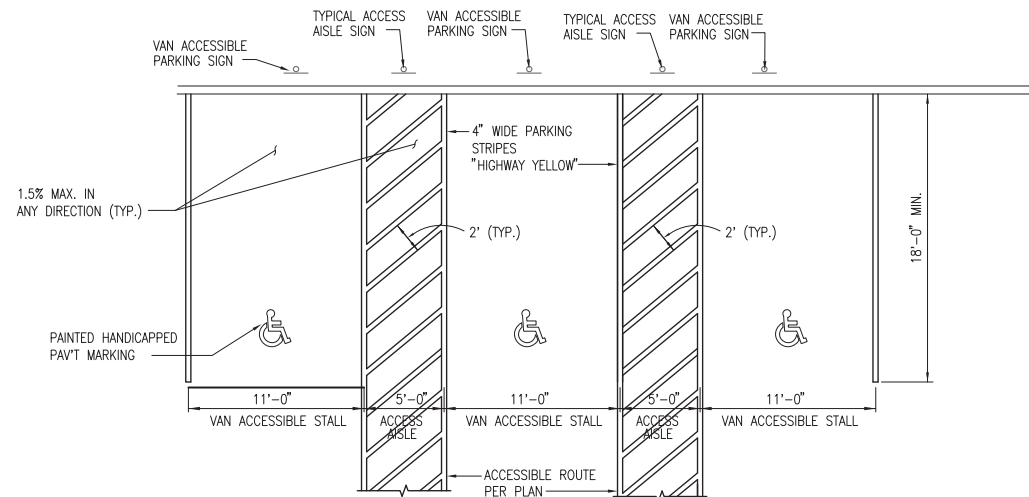
SINGLE LINE STRIPING

NOTE:
INSTALL 2-WAY BLUE REFLECTORS AT EACH FIRE HYDRANT
(2) REQUIRED

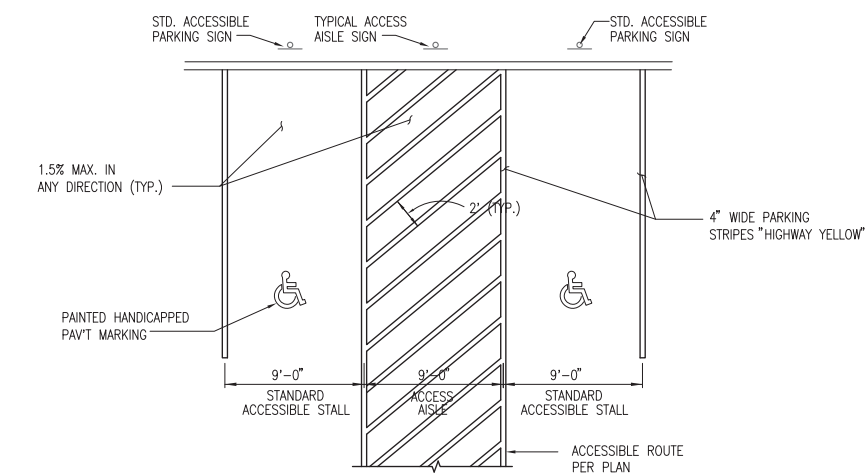
5 BLUE REFLECTOR NOT TO SCALE



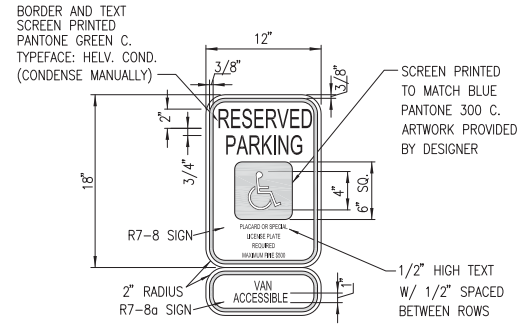
ADA PARKING LAYOUT A



ADA PARKING LAYOUT B

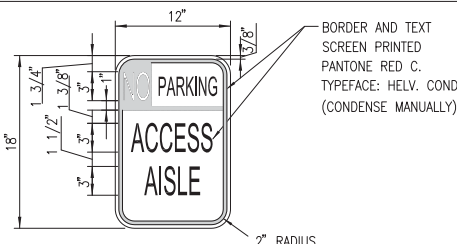


2 ADA PARKING LAYOUT C NOT TO SCALE



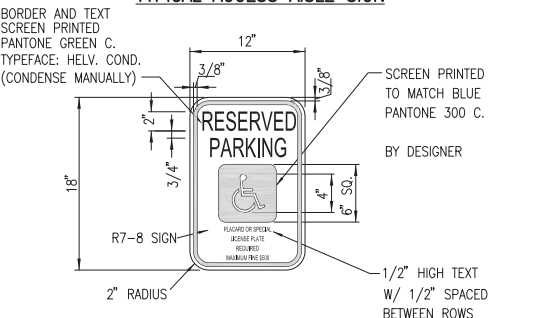
- NOTES:
- SIGNS SHALL BE ALUM. T6061 SHEET COVERED WITH ENGINEERING GRADE REFLECTIVE SHEETING.
 - SIGN LETTERING SHALL BE UPPERCASE SETTERS OF THE TYPE APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.

TYPICAL RESERVED PARKING SIGN FOR VAN ACCESSIBLE STALL



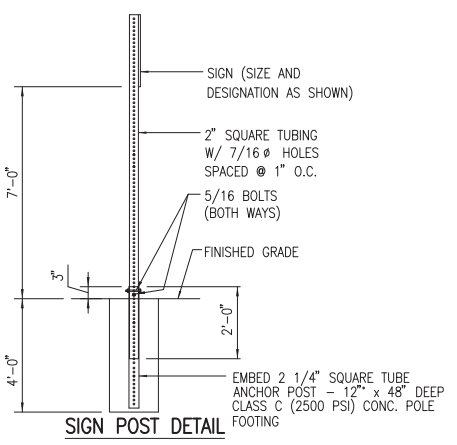
- NOTES:
- SIGNS SHALL BE ALUM. T6061 SHEET COVERED WITH ENGINEERING GRADE REFLECTIVE SHEETING.
 - SIGN LETTERING SHALL BE UPPERCASE SETTERS OF THE TYPE APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.

TYPICAL ACCESS AISLE SIGN



- NOTES:
- SIGNS SHALL BE ALUM. T6061 SHEET COVERED WITH ENGINEERING GRADE REFLECTIVE SHEETING.
 - SIGN LETTERING SHALL BE UPPERCASE SETTERS OF THE TYPE APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.

TYPICAL RESERVED PARKING SIGN FOR DISABLED PERSONS



1 ACCESS PARKING SIGN AND POST DETAIL NOT TO SCALE

Engineering Partners, Inc.
Progressive Solutions
455 ELANIKULA STREET
HILO, HAWAII 96720
www.epnintegrated.com

STEVEN F. PANG
LICENSED PROFESSIONAL ENGINEER
EXP. 06/01/16
NO. 9461-C
HAWAII STATE

Steven F. Pang
SIGNATURE

MARK	DATE	DESCRIPTION	REVIEWED	DATE
△	4/10/14	CURB DETAIL REPLACED W/ BLUE REFLECTOR		
△	5/07/14	ADDENDUM #6		

COUNTY OF HAWAII
DEPARTMENT OF PARKS & RECREATION
101 PALAMU STREET, SUITE 67, HILO, HAWAII 96720 / PHONE: 808.961.8311 / FAX: 808.961.8411

**PAHOA PARK MASTER PLAN
PHASE I - BID SUBMITTAL 2014-02-10**

PAHOA, PUNA, HAWAII

JOB NO.: PR-4234
SHEET NO.: PR-4234
DESCRIPTION: CIVIL DETAILS

TMK: (3) 1-5-002-020

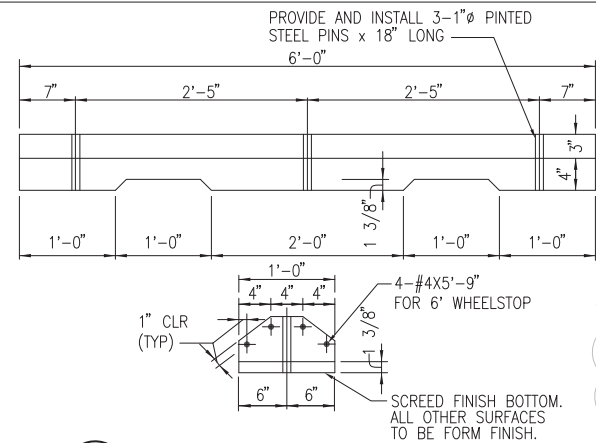
DESIGNED BY: OH

DRAWN BY: OH

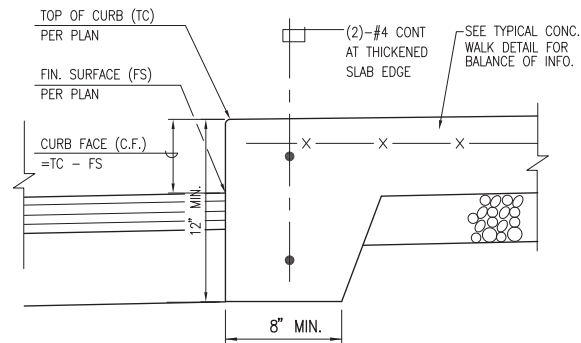
CHECKED BY: YMF

SHEET NO. **C-007**

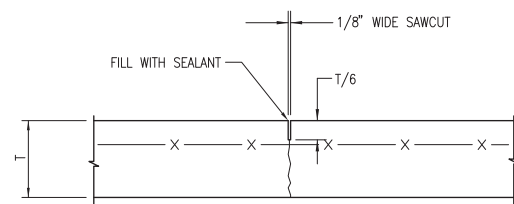
DATE: 2014-02-10



7 6' PRECAST WHEEL STOP
SCALE: NOT TO SCALE

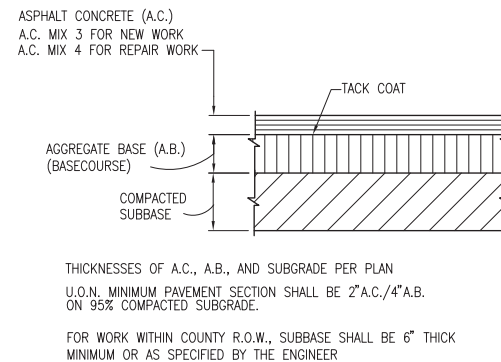


11 MONOLITHIC CONC. CURB &
SIDEWALK TO A.C. PAV'T DET.
NOT TO SCALE

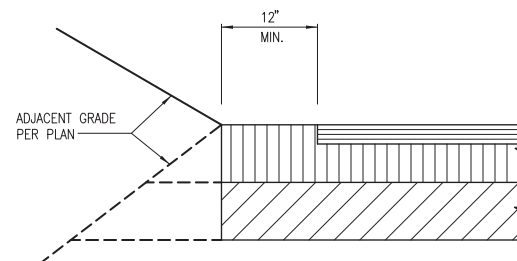


NOTE:
U.O.N. CRACK CONTROL JOINTS (CCJ) SHALL BE SPACED
TO CREATE SQUARE PATTERN, I.E. 5' WIDE SIDEWALK
SHALL BE SAWCUT AT 5' O.C.

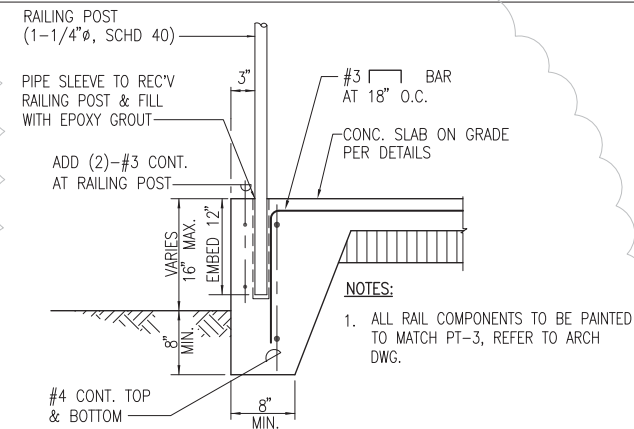
12 CRACK CONTROL JOINT (CCJ)
NOT TO SCALE



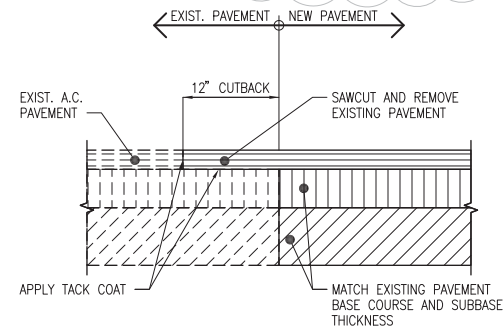
8 TYP. AC. PAV'T SECTION
NOT TO SCALE



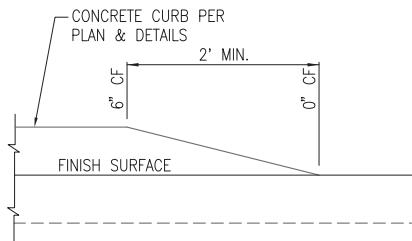
9 EDGE OF PAV'T DETAIL
NOT TO SCALE



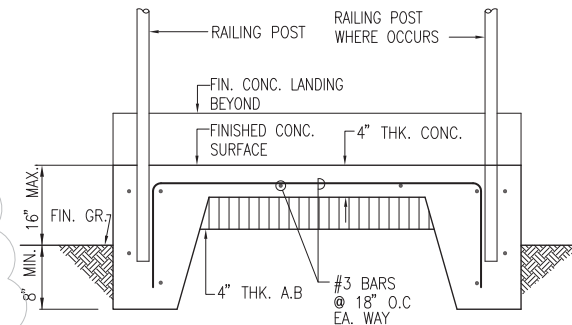
4 RAILING POST EMBEDMENT



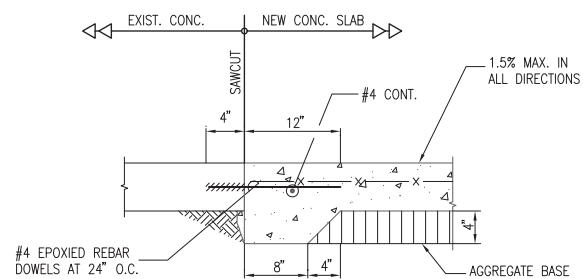
5 NEW TO EXIST. PAV'T DETAIL
NOT TO SCALE



6 CONCRETE CURB TERMINATION

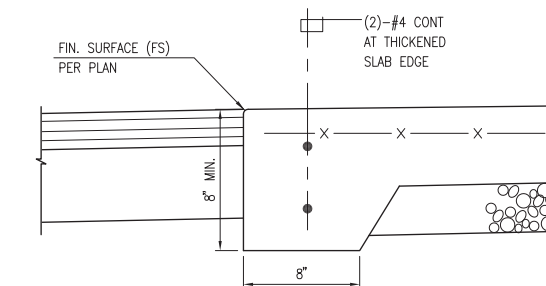


1 TYPICAL ADA RAMP DETAIL

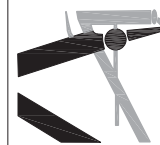


NOTES:
U.O.N. MINIMUM REQUIREMENTS SHALL BE:
1. CONCRETE SHALL BE CLASS "A". T1=> 4".
2. AGGREGATE CUSHION FILL SHALL BE ASTM C33 NO. 67. T2=> 4".
3. REINFORCING SHALL BE GALVANIZED 6"x6" 10/10 (6"x6" W1.4xW1.4) WWM.

2 NEW CONCRETE TO EXISTING CONCRETE



3 FLUSH CONCRETE TO
A.C. PAVEMENT DETAIL
NOT TO SCALE



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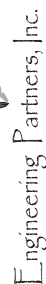
SIGNATURE Yu Chen Tang

MARK	DATE	DESCRIPTION
△	4/10/14	MULTIPLE CHANGES TO SHEET
△	5/07/14	ADDENDUM #6
REVIEWED:		
DEPARTMENT OF PARKS AND RECREATION		DATE

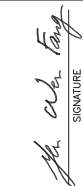
COUNTY OF HAWAII
DEPARTMENT OF PARKS & RECREATION
101 PAUAAHI STREET, SUITE 6 / HILO, HAWAII 96720 / PHONE: 808.961.8311 / FAX: 808.961.8411


PAHOA PARK MASTER PLAN
PHASE I - BID SUBMITTAL 2014-02-10

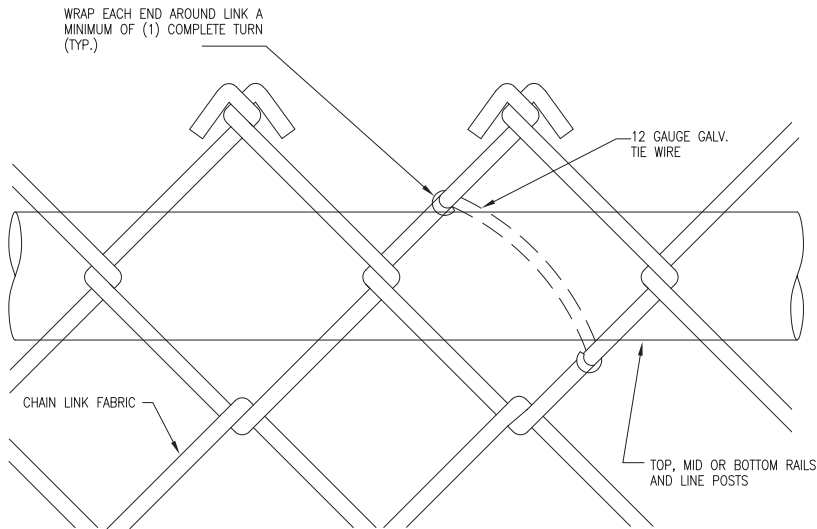
DESIGNED BY:	OH
DRAWN BY:	OH
CHECKED BY:	YWF
SHEET NO.	
C-008	
OF	SHEETS
DATE:	
2014-02-10	



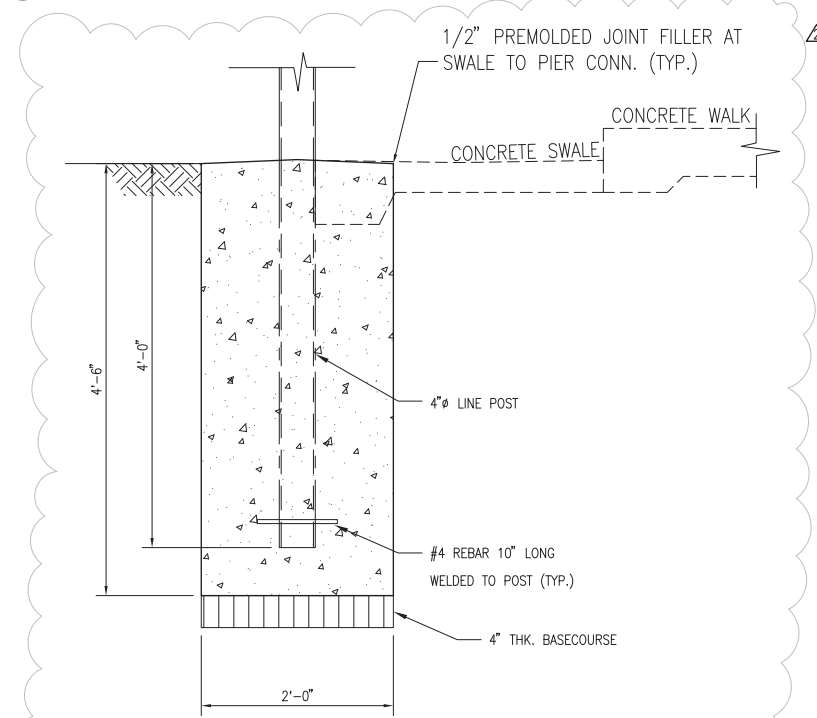
Progressive Solutions
455 E. LANIKAULA STREET
HILO, HAWAII, 96720
www.epintegrated.com



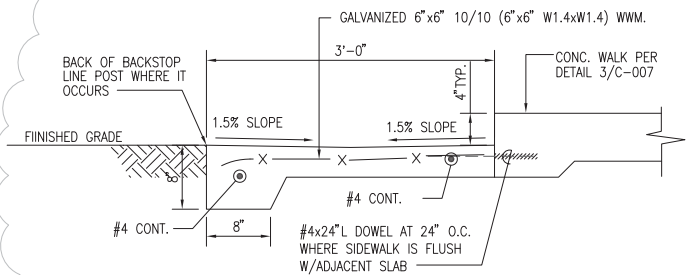
DESIGNED BY:	OH		COUNTY OF HAWAII DEPARTMENT OF PARKS & RECREATION 101 PAUHAH STREET, SUITE 6 / HILO, HAWAII 96720 / PHONE: 808.961.8311 / FAX: 808.961.5411
DRAWN BY:	OH		
CHECKED BY:	YMF		
SHEET NO. C-010		PAHOA PARK MASTER PLAN PHASE I - BID SUBMITTAL 2014-02-10	
△ OF SHEETS		JOB NO.: PR-4234 PAHOA, PUNA, HAWAII TMK: (3) 1-5-0002:020	
DATE: 2014-02-10		PLAN SHEET DESCRIPTION: CIVIL DETAILS	



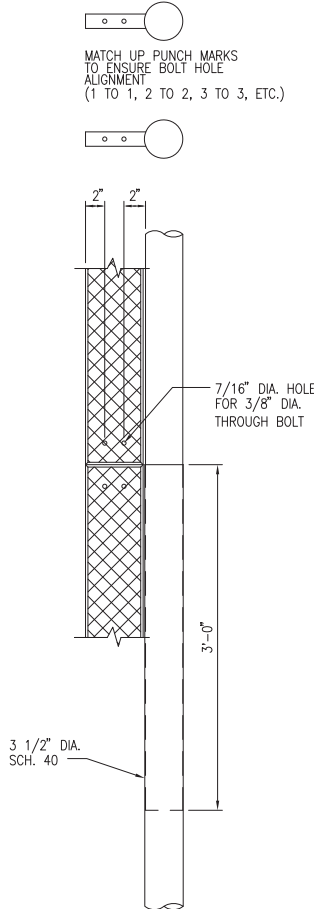
5 TIE WIRE FASTENING DETAIL(TYP.)
NOT TO SCALE



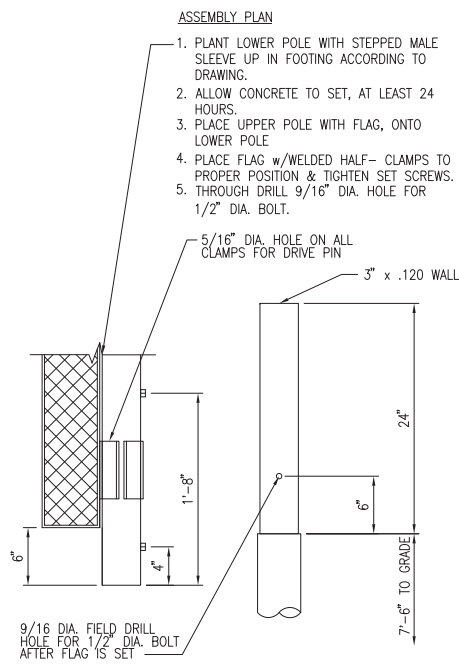
6 PIER DETAIL(TYP.)
SCALE: 1"=1'-0"



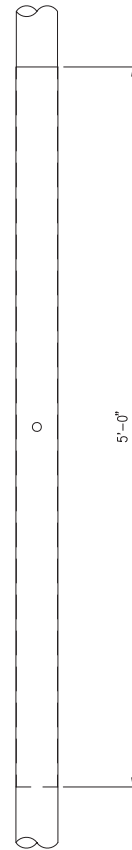
7 BASKSTOP SWALE DETAIL(TYP.)
SCALE: 1"=1'-0"



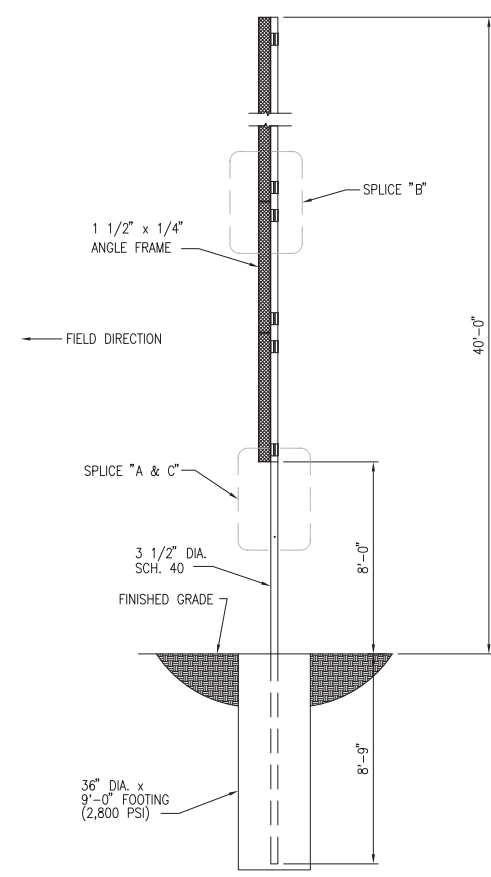
4 SPLICE DETAIL "C"
NOT TO SCALE



2 SPLICE DETAIL "A"
NOT TO SCALE



3 SPLICE DETAIL "B"
NOT TO SCALE



1 40' FOUL LINE POLE
NOT TO SCALE

DESIGNED BY: OH

DRAWN BY: OH

CHECKED BY: YMF

SHEET NO.

C-011

OF SHEETS

1

DATE:

2014-02-10

COUNTY OF HAWAII
DEPARTMENT OF PARKS & RECREATION
101 PAULAN STREET, SUITE C7, HILO, HAWAII 96720 / PHONE: 808.961.8311 / FAX: 808.961.8411

PAHOA PARK MASTER PLAN
PHASE I - BID SUBMITTAL 2014-02-10

JOB NO.: PR-4234

PAHOA, PUNA, HAWAII

TMK: (3) 1-5-002-020

PLAN SHEET DESCRIPTION: CIVIL DETAILS

Engineering Partners, Inc.
Progressive Solutions
455 ELANIKA STREET
HILO, HAWAII 96720
www.epintegrated.com

Professional Engineer
Exp. No. 93461-C
HAWAII STATE

Signature: [Signature]
DATE: _____

MARK: [Symbol]

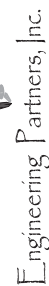
DATE: 5/07/14

DESCRIPTION: ADDENDUM #6

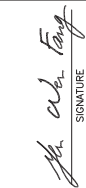
REVIEWED: _____


DEPARTMENT OF PARKS AND RECREATION

DATE: _____



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HILO, HAWAII, 96720
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DESIGNED BY:	OH	 <p>COUNTY OF HAWAII DEPARTMENT OF PARKS & RECREATION 101 PAUHAHI STREET, SUITE 6 / HILO, HAWAII 96720 / PHONE: 808.961.8311 / FAX: 808.961.5411</p>	<p>PAHOA PARK MASTER PLAN PHASE I - BID SUBMITTAL 2014-02-10</p>	<p>JOB NO.: PR-4234 PAHOA, PUNA, HAWAII</p>	<p>TMK: (3) 1-5-0002:020</p>
DRAWN BY:	OH				
CHECKED BY:	YMF				
SHEET NO. C-013		△ OF SHEETS	PLAN SHEET DESCRIPTION: CIVIL DETAILS	DATE: 2014-02-10	

COUNTY OF HAWAII
DEPARTMENT OF PARKS & RECREATION
101 PAUAAHI STREET, SUITE 6 / HILO, HAWAII 96720 / PHONE: 808.961.8311 / FAX: 808.961.8411

PAHOA PARK MASTER PLAN
PHASE I - BID SUBMITTAL 2014-02-10

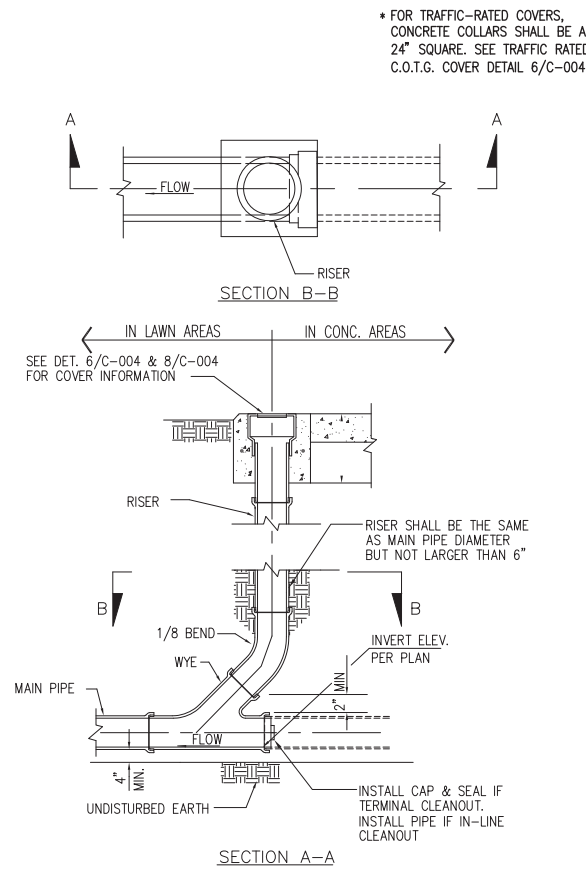
PAHOA, PUNA, HAWAII

JOB NO.: PR-4234

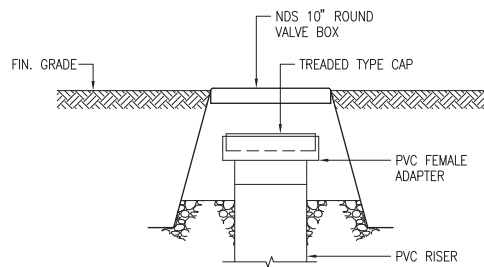
2 OF SHEETS

PLAN SHEET	CIVIL DETAILS
DESCRIPTION:	

DATE: 004. 00 10

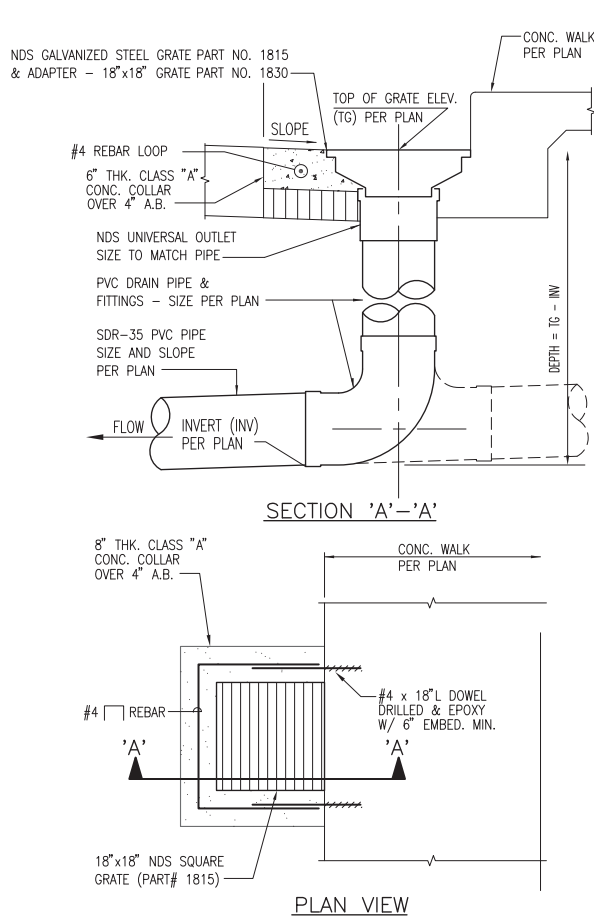


7 **CLEAN-OUT-TO-GRADE**
NOT TO SCALE

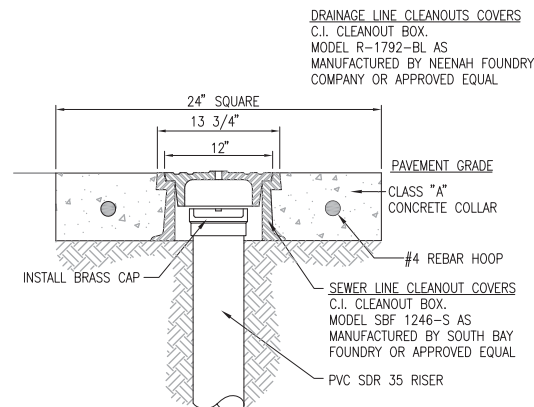


- NOTES:
- ONLY USE IN GRASS AREAS WITH SMALL TRUCK TRAFFIC.

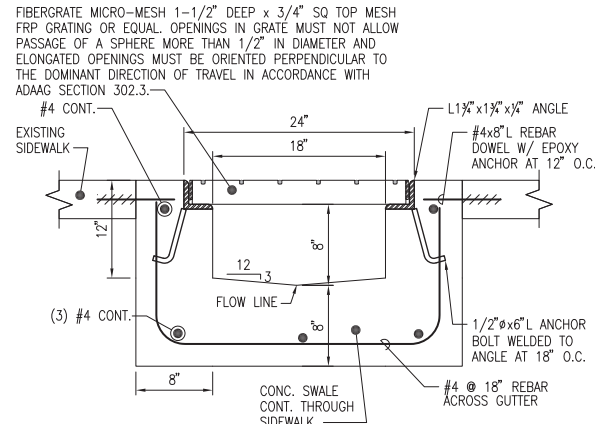
8 **YARD TRAFFIC RATED CLEANOUT TO GRADE COVER**
NOT TO SCALE



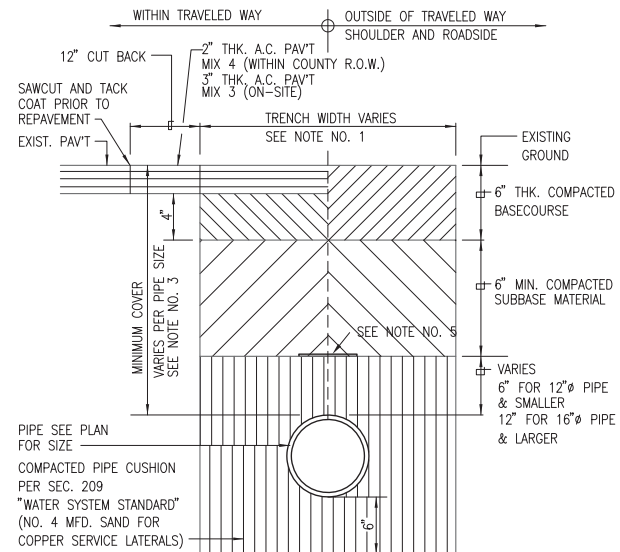
5 **TRAFFIC RATED GRATED YARD DRAIN DETAIL**
NOT TO SCALE



6 **TRAFFIC RATED C.O.T.G. COVER**
NOT TO SCALE

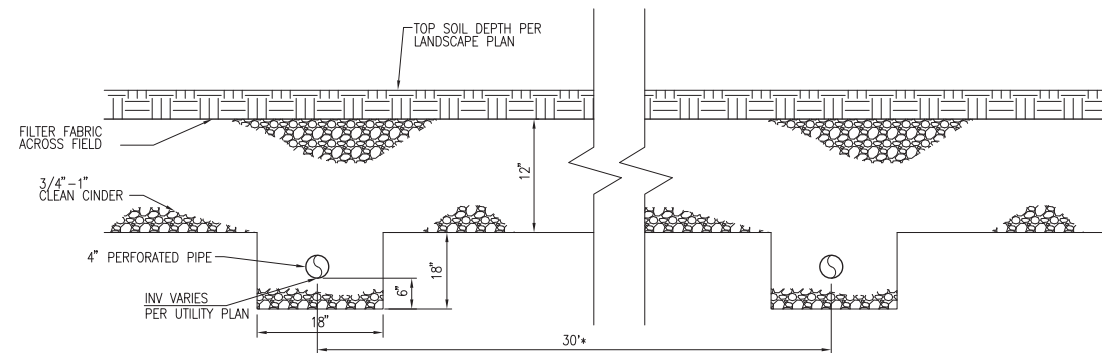


3 **SIDEWALK CULVERT DETAIL**
NOT TO SCALE



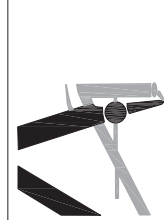
- NOTES:
- SEE TABLE 300-1, PAGE 302-3, WATER SYSTEM STANDARDS AS AMENDED 2002.
 - LOCAL MATERIAL MAY BE USED OUTSIDE SHOULDER AREA.
 - SEE TABLE 100-3, PAGE 102-4, WATER SYSTEM STANDARDS.
 - DRIVEWAY RESTORATION
 - WHERE EXISTING DRIVEWAY IS CONCRETE, 4" THK. CONCRETE REINFORCED WITH 6x6 10/10 WWM ON 4" THK. BASECOURSE SHALL BE USED IN LIEU OF THE ABOVE SECTION.
 - WHERE AN EXISTING DRIVEWAY IS UNPAVED, THE DRIVEWAY SHALL BE RESTORED TO A CONDITION EQUAL OR BETTER THAN THE EXISTING DRIVEWAY.
 - WHERE EXISTING DRIVEWAY IS PAVED, THE DRIVEWAY SHALL BE RESTORED AS SHOWN ABOVE.
 - CONTRACTOR SHALL NOTIFY THE OWNER OF THE DRIVEWAY 48 HOURS BEFORE COMMENCEMENT OF ANY WORK.
 - ALL NEWLY INSTALLED WATERLINES SHALL HAVE A 4 MIL THICK, 6-INCH WIDE, NON METALLIC BLUE WARNING TAPE OVER CENTERLINE OF PIPE LABELED "CAUTION WATERLINE BURIED BELOW"

1 **TYP. TRENCH AND PAV'T REPAIR SECTION**
NOT TO SCALE



• FOR SECONDARY BASEBALL FIELD WIDTH VARIES SEE PLAN

2 **PRIMARY BASEBALL/MULTI-USE FIELD DRAINAGE**
NOT TO SCALE



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Steven F. Ang
SIGNATURE

MARK	DATE	DESCRIPTION
△	4/10/14	SIDEWALK CULVERT EDITED & SWALE REMOVED
△	5/07/14	ADDENDUM #6

REVIEWED: _____ DATE _____
DEPARTMENT OF PARKS AND RECREATION

COUNTY OF HAWAII
DEPARTMENT OF PARKS & RECREATION
101 PALAMU STREET, SUITE C7 HILO, HAWAII 96720 / PHONE: 808.961.8311 / FAX: 808.961.8411

PAHOA PARK MASTER PLAN
PHASE I - BID SUBMITTAL 2014-02-10
TMK: (3) 1-5-002:020
PAHOA, PUNA, HAWAII

JOB NO.: PR-4234
PLAN SHEET DESCRIPTION: CIVIL DETAILS

DESIGNED BY: OH
DRAWN BY: OH
CHECKED BY: YMF

SHEET NO. **C-004** OF SHEETS

DATE: 2014-02-10



- L3"x3"x0.5"x37" LONG
GALV. SEAT ANGLE 7



NOT TO SCALE



7. SUBBASE MATERIAL SHALL BE 3" MINUS GRANULAR MATERIAL, WITH NO MORE THAN 10% FINES PASSING THE #200 SIEVE, COMPACTED TO 95% COMPACTION.
8. GEOTEXTILE FABRIC SHALL BE MADE FOR BURIAL, FINE ENOUGH TO STOP SILT AND ALLOW WATER TO PASS.
9. INSTALLATION OF LEACH CHAMBERS AND BACKFILL SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.
10. SAND HAVING A PERCOLATION RATE OF APPROXIMATELY ONE MINUTE PER INCH. SAND SHALL BE CLEAN, WASHED #4 (NOMINAL SIZE #4-0) OR 3/8" MINUS SINDER. PROOF OF QUANTITY AND ORIGIN IS REQUIRED AT THE TIME OF INSPECTION BY RECEIPTS, HAULING TICKETS, ETC. SOIL REPLACEMENT SHALL BE COMPACTED TO 90% COMPACTION.

NOTE: CONTRACTOR SHALL NOTIFY ENGINEER OF UNUSUAL CONDITIONS FOUND DURING CONSTRUCTION THAT COULD IMPACT IWS FUNCTION SUCH AS LAVA TUBES, UNDERGROUND HOLES, WATER, EVIDENCE OF INTERMITTENT FLOWING WATER, ETC.

SCALE: NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



- NOTE: CONTRACTOR SHALL NOTIFY ENGINEER OF UNUSUAL CONDITIONS FOUND DURING CONSTRUCTION THAT COULD IMPACT IWS FUNCTION SUCH AS LAVA TUBES, UNDERGROUND HOLES, WATER, EVIDENCE OF INTERMITTENT FLOWING WATER, ETC.....



(1)

NOT TO SCALE



NOT TO SCALE



DESIGNED BY:	OH		COUNTY OF HAWAII DEPARTMENT OF PARKS & RECREATION 101 PAUHAH STREET, SUITE 6 / HILO, HAWAII 96720 / PHONE: 808.961.8311 / FAX: 808.961.1441
DRAWN BY:	OH		
CHECKED BY:	YMF		
SHEET NO. C-005		PAHOA PARK MASTER PLAN PHASE I - BID SUBMITTAL 2014-02-10	
DATE:	 OF SHEETS	JOB NO. : PR-4234 PAHOA, PUNA, HAWAII	TMK: (3) 1-5-002:020
2014-02-10		PLAN SHEET DESCRIPTION: CIVIL DETAILS	